

# From classroom to classZoom: Participation and engagement in an online environment

**Aurora Murphy, Deborah Nixon, and Joseph Yeo**

*University of Technology Sydney, NSW 2007, Australia*

Email: [aurora.murphy@uts.edu.au](mailto:aurora.murphy@uts.edu.au), [deborah.nixon@uts.edu.au](mailto:deborah.nixon@uts.edu.au), [joseph.yeo@uts.edu.au](mailto:joseph.yeo@uts.edu.au)

(Received 19 August, 2021. Published online 18 June, 2022.)

Student participation and engagement are central to learning, yet behaviours that indicate participation and cognitive engagement can differ in online and face-to-face classes. This difference became apparent in 2020, when universities around the world transitioned from face-to-face classrooms to wholly online classes. With this move, tutors' perceptions of participation and engagement changed. Based on written reflections by 13 tutors who teach at an Australian university, we found that tutors recognised new/different indicators of engagement in the classZoom. In addition, the tutors observed that issues around student diversity and access greatly influence how students participate in the classZoom. Tutors also learnt not to assume that students were not participating and engaging online if they did not enact the same behaviours expected of them in face-to-face classes. Using active learning theories, this paper argues that participation and engagement can be understood and fostered online with particular attention to student diversity and digital access. These understandings enrich current pedagogical perceptions and inform educators to 'design in' more active forms of engagement in the classZoom. What has been learnt through this experience has salience beyond the confines of COVID lockdowns and into hybrid modalities of online and face-to-face teaching practices.

**Key Words:** participation, engagement, online, Zoom, diversity, active learning, language development, COVID-19.

## 1. Introduction

This paper investigates the impact that migrating to a wholly online environment has had on tutors' perceptions of students' levels of participation and engagement in language development tutorials (LDTs) at a large Australian university. At our university, all commencing students are screened for their language levels and, if needed, directed to compulsory LDTs that complement a core discipline subject. Most of these students are located outside Australia and are the most directly impacted by travel bans. In 2020, of the 1832 students directed to the LDTs, 45.85% of them were reported to be offshore. The LDTs sit within a whole-of-institution framework for embedding English language that is unique in that it is both subject and discipline-specific, and includes affective aspects of language development (Edwards et al., 2021, p. 65). Thus, each of the faculties has a dedicated Academic Language and Learning (ALL) team member assigned to manage the design and delivery of materials to students in the LDTs. This means that every step of the tutorial must be scaffolded so that tutors also understand the flow of the material: how to time, structure, and manage breakout rooms, collaborative reading, writing, and speaking exercises, and tailor materials to meet the needs of the students in their groups. The aim of the LDTs is to encourage more active scaffolded engagement and foster autonomous learning in both face-

to-face, and during COVID, online environments. The LDTs act as adjunct to the main subject tutorials so they must lockstep into the readings, writing demands, assessment task and general narrative development of the subject the LDTs support. This approach should facilitate the students' abilities to engage more confidently with their main subject content. However, according to a study on student engagement in online learning environments by Kahn et al. (2017, p. 212), 'the concerns and actions of the students were influenced by their structural settings'. Thus, a fully online environment can be expected to impact on students' reflexivity, agency, and engagement.

Our study is primarily focussed on how tutors perceive student participation and engagement online. Yet, from tutors' responses in a short questionnaire, it became apparent that the terms 'participation' and 'engagement' were being used interchangeably. This is echoed in educational literature from the late 1980s up to 2020 (Bergmark & Westman, 2018; Dymont et al., 2020; Finn, 1989; Hellmundt & Baker, 2017; Macfarlane & Tomlinson, 2017; Zyngier, 2008). For example, in a review of 45 articles on student engagement, 31 did not explicitly define the terms and many conflated them (Jimerson, Campos, & Greif 2003, as cited in Kahu, 2013, p. 762). The Australian Council for Educational Research (2010) name participation as part of engaging with class work and write that 'engagement is concerned with students' participation in activities and conditions that have been linked with high-quality learning' (p. 1). The *Student Success* journal featured a special issue in 2018 on student engagement, and writers in this issue often used the terms interchangeably (Kahu & Lodge, 2018; Nieuwoudt, 2018). When small distinctions are perceptible, the term 'participation' often refers to students' interaction with class activities (Kahu & Lodge, 2018; Nieuwoudt, 2018). Due to this slight emphasis of 'participation' as observable student activities, the more recent pedagogical literature usually favours the term 'engagement'. The idea of 'engagement' encompasses the affective and relational aspects of learning as well as the behavioural. For example, the large-scale Quality Indicators for Learning and Teaching (QILT, 2020) survey, which gains responses from over 270,000 students from all 41 Australian universities each year, asks about students' feelings of engagement with their tertiary institution and does not mention 'participation'. They presume that 'engagement' refers to students' learning activities as well as their feelings of connection to their tertiary institution. Accordingly, our study uses both terms 'participation' and 'engagement' throughout to take account of this varied usage.

Student participation and engagement in the digital classZoom is highly influenced by the types of platforms, or modalities, used in class. We use the term 'modality' to refer to the larger online context for learning, and within that digital modality the various applications include Zoom (hence our term, the 'classZoom'), YouTube, Microsoft Teams, and Canvas as the Learning Management System (LMS) for hosting tutorials and materials. A hasty migration to wholly online, precipitated by the COVID-19 pandemic, had an immediate impact on approaches to teaching and learning practices. It also meant that tutors and students needed to adjust to the online environment and their expectations and perceptions of what engagement and participation now meant.

## 2. Literature review

This paper explores the enablers of student participation and engagement online, with particular reference to how tutors can enhance these behaviours. We turn to pedagogical literature on remote, distance, and online teaching, particularly that which refers to working with culturally diverse students who have low levels of English language proficiency. Our research is guided by theories of active learning, including broad reviews of research (Bergmark & Westman, 2018; Bonwell & Eison, 1991; Prince, 2004). We use these principles and practices of active learning because they give precedence to our topic of interest: student participation and engagement. Theories of active learning have originated from face-to-face teaching and looking at these ideas within an online context offers insight into teaching environments of the future, which could be combinations of online, face-to-face, synchronous, and asynchronous modalities. Our literature

review of active learning theories, coupled with those about online education, is enriched by our own experiences as content creators. We design the materials for the tutors who offer their reflections for this study, and tutor on this program ourselves. We situate ourselves as language educators who use active learning principles and practices in our own face-to-face classrooms and, like our tutors, have also struggled with the move to fully online classes. Our intent is to use reflections from the rapid introduction of the classZoom to inform our own work, the work of our tutors, and that of others who teach culturally and linguistically diverse students online.

### **2.1. Participation and engagement within an active learning context**

Over the past 30 years, active learning has become the leading approach to teaching and learning (Freeman et al., 2014; Hattie, 1999). The principles and practices of active learning place students' capacity to participate in their education and engage at the centre. Unlike earlier teaching and learning styles, which required more imperceptible forms of student interaction like listening and remembering, active learning requires students to undertake learning activities that can more readily be observed. In an active learning classroom, students do and teachers facilitate (Luse 2002, as cited in Zyngier, 2008, p. 1769). In their early review of the literature on active learning, Bonwell and Eison (1991) point out the vital role of participatory activities where active learning requires 'instructional activities involving students in doing things' (p. 5). This understanding that students 'do things' in order to learn is echoed in a later review by Prince (2004), who found a consensus view that active learning requires 'student activity and engagement in the learning process' (p. 223). Active learning requires students to move away from being passive absorbers of information and become active collaborators. In this approach, learning relies upon interactive levels of participation and engagement: learner-instructor interaction; learner-learner interaction, and learner-content interaction (Moore, 1989).

Yet, active learning theories have also been critiqued for having an over reliance on student participation and engagement. Claims that higher rates of participation and engagement lead to higher retention, marks, and interest in studies have been disproved and questioned by peer-reviewed studies (Zyngier, 2008). Some studies insist that student engagement does not necessarily lead to increased grades (Bangert-Drowns & Pyke 2001, as cited in Zyngier, 2008, p. 1770). Macfarlane and Tomlinson (2017) critique current theories of engagement as originating from a neo-liberalism lens that serves learning institutions who can more accurately surveil and govern teacher and student behaviour, rather than a genuine discussion on what encourages learning. They suggest that engagement can be understood in terms of 'performativity, marketing, infantilisation, surveillance, gamification and opposition' (Macfarlane & Tomlinson, 2017, p. 5). The demand for students to participate and engage in classroom activities has led to an increase in 'busy work', asserts Dymont et al. (2020). They write that students are required to complete an abundance of weekly quizzes, worksheets, and pre-work in order to perform their own learning. Students do not necessarily learn more from this type of participation and it is primarily intended to prove students' learning rather than enable it (Dymont et al., 2020).

While these criticisms of active learning have merit and are worth considering when designing and running classes online and face-to-face, we suggest that a diversity of activities that enable student engagement are beneficial to learning. Quizzes, worksheets, and pre-work, as well as breakout room discussions, online whiteboards and other digital activities can inspire participation and engagement from students and offer different ways of interacting with the material. These types of activities can also offer students feedback on their learning and suggest ways forward. Yet it is important to remember that these kinds of visible active learning activities are not the only ways to engage students in their learning. Moving to a wholly online space can offer an opportunity for educators to reflect on their use of traditional active learning strategies and explore other ways of enhancing student participation and engagement.

When moving to online classes, the markers of student participation and engagement like learner-instructor interaction, learner-learner interaction, and learner-content interaction mentioned above, are even harder to ascertain. Within an online context, when tutors speak of student participation, they are usually referring to observable behaviours on authorised university platforms. For example, a student who is said to participate is one who attends synchronous lectures, turns on their camera in class, asks questions, and contributes to online subject discussion boards. However, issues such as technology and socioeconomic status can adversely impact on students' ability to demonstrate their participation (Muir et al., 2019). Technological issues may prevent students from turning on their cameras or microphones, accessing learning platforms like Google and YouTube which are banned in their countries, or having access to an appropriate device and/or adequate bandwidth to participate and engage in prescribed online learning activities.

Kennedy (2020) proposes two distinct types of engagement in online learning environments: behavioural and cognitive. Behavioural engagement is reflected in one's visible or observable actions such as typing in a chat or opening a file. Cognitive engagement, on the other hand, entails the invisible aspects of learner-content interaction, when one is interacting and engaging with the learning content cognitively. The two types of engagement may or may not conflate or intersect – one who displays all the expected visible and observable behaviours in an online learning environment are not necessarily engaged cognitively with the learning materials or activities. When considering classZoom participation and engagement, tutors must not simply rely on the observable or visible indicators that they are familiar with in face-to-face settings. The diversity of our students and their home/learning environments calls for an acknowledgement of a broader spectrum of visible and invisible participation and engagement indicators which will be discussed below.

## **2.2. Factors influencing students' participation and engagement online**

Likewise, participation and engagement are also influenced by students' language levels. Students who have low language proficiency participate and engage differently online than they do in face-to-face settings. Although technology can inhibit participation and engagement, it can also enhance it. When looking at the participation styles of 48 16-year-old female ESL learners in high school classrooms, Chew and Ng (2015) found that students with low language abilities were more confident and willing to participate in online discussions and classwork than in face-to-face classrooms. This was particularly true for shy students who are not confident in their language levels. One third of their participants said that they found online classrooms fun and interesting because they felt more relaxed in them and were familiar with using digital modes of communication. This study shows that the students in LDTs, who have language levels below that which is expected for their course, may be more able and willing to participate and engage in the classZoom than the classroom.

While Chew and Ng's (2015) study showed that students with low language abilities may feel more able and willing to visibly participate in online classes, this can shift when classes have students with both high and low language abilities. This has resonance with our students, who are enrolled in courses with students who have higher language levels than them, but also participate in our LDTs which are entirely designed for students with low language levels. It may be that while students actively participate and engage in classes with other students with low language abilities, like our LDTs, they may be too shy to do this with students with much higher language levels. Our experiences show that in face-to-face mixed-ability classes, students can experience discomfort when speaking with each other and their tutors. This discrepancy of language ability can particularly inhibit those students who are not confident in their capacity to match the ability and cultural norms of other students. As the fully online learning context is new for us, our tutors, and our students, it is worth exploring if students with low language abilities are inhibited in their online participation and what tutors can do to rectify this.

Two researchers in online education, Phirangee and Malec (2017), found that students with low language abilities may be more sensitive to the relational aspects of teaching and learning than confident speakers. In their interviews with six graduate students from different universities across Canada, these authors found that students are reluctant to speak in class when they do not have strong relationships with other students and their tutor. As one 22-year-old full-time international student from China who is studying English for the first time expressed:

*Whenever I want to say something [in class] I really look stupid. It's true. Although we learn the same chapter and learn the same knowledge, it's different [for me]. And I find it really hard to join their small circle. They were all native speakers [of English] and I don't think they meant to exclude me but sometimes they are laughing and joking and talking so fast and I don't even know what they are saying and I don't know why they are laughing. (Phirangee & Malec, 2017, p. 168)*

This student explains that the relational aspects of learning are especially important for them and, presumably, others with low language abilities. Although issues of student participation and engagement are usually concerned with class work, rather than relationships, when working with students who have low language levels, it may be pertinent to consider how their social connections enable or destabilise learning. Other studies also reveal how the relational aspects of teaching and learning are vital and can have drastic effects on students' ability and willingness to participate in classes (Bhagat & Chang, 2018). It can be especially difficult to support the social contexts for learning in the classZoom as students are never physically in the same place and often do not turn on their cameras and microphones. However, as this initial research reveals, these relational aspects of teaching and learning are both more difficult and more important when students have varied language abilities and cultural backgrounds.

While the relational aspects of teaching, or social presence, can be particularly challenging in the online space, there may be some ways that tutors can enhance it. In their research with 441 students who studied online in India and Taiwan, Bhagat and Chang (2018) found that the factor which has the highest impact on student participation is the level of trust students have in their tutor. Recent conversations between universities in Australia echo this idea. A Higher Education Research and Development Society of Australasia (HERDSA, 2020) webinar, 'Making online learning connect with your students', was held four months into the first COVID-19 lockdown in which all classes in universities across Australia moved completely online, and students were invited to speak about online connection. One student reported that when she does not see her tutor on Zoom, she cannot connect with them or the subject. Another student commented that when tutors appear on camera, they are more able to relate their passion for the subject. This helps students engage with the subject. Yet, this engagement by students who do not have their own cameras on, is difficult to assess. Dr Peter Wagstaff from Monash University believes that the new 'skipping class' is joining the classZoom link, then turning off cameras and microphones (HERDSA, 2020). With this lack of social presence or visible engagement, participation is hard to gauge in the classZoom. Our research into tutor's perceptions of student participation and engagement sits inside this context, and charts some of the challenges and insights of shifting to the classZoom and how tutors can support student' active engagement in their learning in this vastly different environment.

### 3. Research objectives and methods

Our current study examines LDT tutors' perspectives and perceptions on what constitutes student participation and engagement in their classZoom. This is significant because classroom-based tutors suddenly went from a familiar classroom modality into the unfamiliar territory of the classZoom when campuses across the country were shut at the outbreak of the global pandemic. Consequently, it is of interest to investigate if and how the tutors' perspective and perception on

student participation and engagement shifted from classroom to classZoom. Although we did not directly ask tutors what they did to enable greater participation and engagement online, their responses suggested many different activities and approaches. We have included some of these ideas in this paper due to their potential to inspire others and enrich the online teaching experience. To understand teaching perspectives and perceptions of online participation and engagement qualitatively, in Spring 2020, we asked LDT tutors to reflect upon their experiences through three open-ended questions in an online questionnaire using Microsoft Forms. These questions were:

In your experience of teaching fully online in Spring 2020, reflect on the following questions:

1. What were your expectations for classroom participation in the LDTs?
2. What indicates that students are engaged in online learning?
3. What indicates that students are disengaged in online learning?

Responding to an online questionnaire individually allowed tutors the space and time to reflect on their classZoom experience before providing considered, reflexive responses. Once completed, these qualitative responses could be readily accessed for thematic analysis. Conducting interviews was decided against because doing so with potentially 19 tutors, individually or in groups, would be logistically and financially challenging since facilitators would have to be employed and the interview recordings transcribed. In addition, in a group interview context, tutors might not be willing to speak freely, and we wanted to mitigate the risk of any views being coloured by others.

### 3.1. Participants

With ethics approval obtained from the Human Research Ethics Committee of our university, all 19 LDT tutors who taught in the second teaching session/semester of 2020 were invited to participate in the current study. They were responsible for teaching 52 discipline-and-subject-specific LDTs in 20 subjects across 7 faculties: Arts and Social Sciences; Business; Design, Architecture and Building; Engineering and Information Technology; Health; Law; and Science. Five of these tutors taught across 2 (or more) faculties. These LDT tutors had had the experience of teaching the LDTs face-to-face pre-COVID-19, and rapidly moving to online teaching at the start of the first teaching session/semester of 2020, which continued into the second teaching session/semester. Of the 19 tutors, 13 of them agreed to participate in the study by completing the online questionnaire.

### 3.2. Procedure

The link to the online questionnaire was enclosed in an email to the 19 tutors and they were given two weeks to respond to the questions. The three open-ended questions were designed to elicit tutors' reflection on their expectations and indicators of student participation and engagement online. We elicited their expectations and understandings of student participation and engagement with reference to how they understand and foster it in an online learning environment. After the given deadline, the questionnaire responses were downloaded from Microsoft Forms. Of the 19 tutors, 13 of them completed the questionnaire and responded qualitatively to the three open-ended questions.

### 3.3. Data analysis

We analysed this qualitative data thematically in order to draw out shared perspectives from the tutors. Our research question, 'how do tutors perceive student participation and engagement in the classZoom?', guided our analysis. This paper is a 'theoretical' thematic analysis designed to gather insight into our specific research question rather than incidental and contingent tutor perspectives (Braun & Clarke, 2006). The data was analysed by first coding the data separately, using a descriptive approach to uncover rich detail of tutor responses across the entire data set. Our coded responses primarily looked for repetition and prevalence while still attempting to notice any unexpected insights from the 13 tutors. These coded responses were recorded in three separate

matrices, with codes such as ‘cameras on’ and ‘breakout rooms’ which were supported by quotes from the 13 tutors. We then came together to read and reconsider our three sets of codes, applying an eclectic model to find out what new codes could be drawn together into overarching themes (Saldana, 2013). Themes were decided based on patterns revealed by tutor responses. These were the most prevalent remarks, such as those which uncovered how students participated differently online than in face-to-face classes. However, some themes were more emergent, and although not repeated by most tutors, showed exceptional insight. One example of this insight is specific tutor strategies for encouraging student engagement in end-of-class reviews and trialing different digital tools in the classZoom. The data, firstly divided into individual codes, and then common themes across the three separate analyses, provides the basis for our enquiry into student participation and engagement as seen by tutors who prior to 2020 mostly taught in face-to-face environments.

## 4. Findings

The tutors’ responses to the three open-ended questions revealed how they perceived student participation and engagement in an online learning environment, and consequently what they looked for in their classZoom to determine if their students had participated and were engaged. As there was a lot of crossovers in tutors’ responses to our three questions, we have broken this section into the two primary ways that tutors perceived students’ participation and engagement in the classZoom: visible and invisible. Tutors’ expectations of participation and engagement (question 1) and that which they believe indicates participation and engagement (question 2 and 3) have many similarities, and most of these similarities come from their experiences of teaching face-to-face. For this reason, it is pertinent to look at tutor responses through the lenses of visible and invisible engagement, as these more deftly show how face-to-face teaching was transferred to online classes. Each of these themes are discussed below and illustrated with de-identified quotes from the tutors where relevant and appropriate.

### 4.1. Visible engagement

‘Visible engagement’ refers to the way students’ behaviour in class explicitly shows their interactions with members in the class, and class activities (Muir et al., 2019). With the prevalence of, and preference for, face-to-face teaching at our institution, it is of no surprise that tutors transferred their previous understandings and expectations on participation and engagement to the classZoom. These expectations originating from face-to-face teaching primarily anticipate visible engagement. This is because in a classroom, students need to be physically present and are more able to engage in designated class activities. Visible engagement is usually shown through student behaviours such as being present, asking and answering questions, speaking during group discussions, and handing in class work on time. When asked, our tutors responded that they also anticipate these kinds of visible indicators of engagement. Unanimously, the tutors primarily expect a physical presence in the classZoom and they reported that they expected students to “*be on time*” (Tutor 9) and have “*cameras on*” (Tutors 3, 7 and 12) as proof of attendance and participation. This is followed by behavioural manifestations of engagement like being “*active in chat*” (Tutor 12), “*interacting with others*” (Tutor 7), “*contributing to class discussions*” (Tutor 12), “*ask[ing] questions*” (Tutor 2) and “*nodding*” (Tutor 7) as signs and indicators of students’ engagement with their classZoom. As summarised by Tutor 10,

*My expectations were: ... come on time, tell me if you can't, talk to group members if you're working in a breakout room, answer questions when I ask you, type answers in the chat if that's the activity, complete the production task in each tutorial.*

Most tutors anticipate visible indicators of engagement that are behavioural and measurable, as illustrated by the following quotes: “*students ask questions, respond to questions, complete set tasks*” (Tutor 3), “*work together in groups on a shared document*” (Tutor 6), “*completing before*

*class activities, and being able to contribute to the review of these*” (Tutor 2). Tutors anticipated that, like face-to-face classes, students would have a visible presence so they could socially interact with peers and the tutor. This social interaction is enabled by visible presence and becomes more difficult without use of cameras and microphones.

#### 4.2. Invisible engagement

While tutors anticipated visible engagement in the classZoom, they also realised that students may be engaging with class content in a less visible manner, cognitively and/or in the background. Tutors realised that in a classZoom, physical presence and visible engagement may or may not be true indicators of students’ interaction with class materials or their learning. When a student does not have their camera on, or does not speak up during a discussion, thereby not displaying visible indicators of engagement, it does not necessarily imply that they are disengaged. We need to take into account and accept the less visible forms of engagement in the classZoom. As Tutor 13 notes: *“Sometimes students may not be participating because they’re processing what’s being presented.”*

Issues around digital access, living environments and comfort in speaking on video were seen as influencing how students chose to engage. Tutor 7 wrote that, *“no camera is NOT a sign of disengagement”*. This tutor realised that students may have their cameras off for many reasons and may be carefully taking note of what is happening on the screen. Several tutors recognised the challenge in knowing or being able to tell if students were engaged in their classZoom. For instance, Tutor 1 said,

*... the thing I found most challenging about online teaching was the inability to monitor what the students were doing and feeling (e.g., not being able to read students faces for signs of confusion, comprehension, etc. and [not] being able to see them ‘do’ their work).*

Consequently, over time the tutors were less reliant on the behavioural manifestations as signs and indicators of engagement. As described by Tutor 12, *“... most did not have cameras on, did not use chat ... but the poll activities did reveal they were listening”*. This acknowledgement of students’ invisible engagement is summed up in the following quote:

*Usually we use indicators such as turning the video on, joining discussions and handing in homework as measures of engagement but it’s possible that students are engaged (and learning) and not doing these things. There is evidence of this in the presentations at the end of the semester where students demonstrate they have been actively involved in the learning journey each week. (Tutor 13)*

This tutor points to an important issue for educators in the transition to more online forms of study. This quote shows that when tutors ‘design in’ different ways of engaging online, both visible and invisible, then they are more accurately able to gauge students’ levels of engagement. In the classZoom, there may be less visible engagement and more invisible ways of engaging with learning and tutors will need to employ different digital modes to enable it.

## 5. Discussion

The tutor reflections suggest that student participation and engagement look different online than face-to-face. Tutors in our study reported that they expected student participation and engagement to vary when shifting to the online teaching and learning modality. To be perceived as an active participant in a face-to-face classroom, students must attend the class, interact with other students, and participate in prescribed teaching and learning activities (Prince, 2004). Yet, when tutors anticipate this sort of direct participation and engagement in the classZoom, they may not recognise the multiple ways that students are participating and engaging. To replicate the classroom, tutors wrote about their struggle with students (not) using cameras and microphones in class. While

using cameras in class can reassure tutors that students are directly engaging with class content, it can also exacerbate unhealthy Zoom fatigue. Zoom fatigue is tiredness incurred by, ‘excessive amounts of close-up eye-gaze, cognitive load, increased self-evaluation from staring at video of oneself, and constraints on physical mobility’ (Bailenson, 2021, p. 1). This phenomenon is exacerbated for our students by the required number of classZooms and other online interactions for long hours over consecutive days. In addition, some of our offshore and local students are genuinely unable to turn their cameras on due to their technical problems like not having the right device or good internet connection, and/or economic issues such as timetable clashed with going to work (Tutors 3, 4, 8 and 12). Consequently, tutors need to exercise flexibility and be open to accept various forms of indirect engagement, like cameras on/off, mics on/off, audio and or textual interaction while using Zoom or Teams chat functions, online whiteboards, and other online applications.

Tutors also need to be explicit and clear from the outset about their expectations regarding acceptable forms of participation and engagement. Tutors in our study stressed that the classZoom necessitates a recognition that less visible forms of engagement compared to the classroom may be just as legitimate. In recognising this, our tutors were able to use digital tools to draw out ways of participating and engaging that were new to them and to students (some examples of these approaches are given in each of the sub-sections below). As articulated by Kennedy (2020), the focus on an interactive perspective in designing online learning does not always correlate to greater engagement, or at least immediately recognisable forms of engagement. Whether teaching fully or partly online, tutors should remember that student participation and engagement are different in the classZoom and classroom and there cannot be a simple replication of one to the other. In the sub-sections below, we look at what our tutors and the scholarly literature reveal about speaking skills, reading and writing skills, an enhanced capacity for feedback, and an enhanced need for social presence online.

### 5.1. Speaking skills

As a matter of concern, tutors in our study believed that using Zoom did not support students to participate and engage in practising their speaking skills. Other research conducted during COVID-19 lockdowns have also noted the difficulty in supporting students to practise speaking skills in online classes (Dyment et al., 2020). Students who have English as an additional language particularly struggle with speaking in online classes (Phirangee & Malec, 2017). As our LDTs are designed to develop students’ skills and confidence in all four language macro skills (reading, writing, listening and speaking), this is a significant loss. In order to practise speaking skills in the classZoom, students need to be prepared to turn on their cameras and microphones. Tutors noticed that some dialled into the classZoom from home or study environments, others came to the classZoom from the train, work, or other noisy environments. To practise speaking, students need to take advantage of breakout room activities which require them to speak and conduct work in small groups. Yet, several of our tutors reported that continuing to request students turn on cameras and microphones to speak ‘*was not a great use of time*’ (Tutor 1). This tutor realised that the absence of student cameras and microphones did not signify a lack of engagement, and that online and face-to-face participation and engagement look different. However, they did point out, as did all 13 tutors in our study, that students did not have many opportunities to practise English speaking skills in the classZoom.

Although most tutors found it difficult to successfully enable visible engagement with speaking skills in the classZoom, they did notice some strategies that could support students’ engagement. Tutors need to ‘design in’ strategies which enable students to practise and showcase their speaking skills in online contexts, as they cannot simply replicate face-to-face approaches. Other studies of language learners also report the challenge and inefficacy of trying to use speaking activities that mimic face-to-face learning (Fitriani, Bandung & Kadri, 2020; Stickler & Shi, 2013). One useful strategy to support participation in speaking activities in online classes is to allow students time

to rehearse and prerecord their speech outside the classZoom, and then practise in a small group of students with similar language abilities, before speaking to the whole class. This helps students gain confidence and feedback before being vulnerable in front of large classes. Another strategy which was used by our tutors aims to foster spontaneous speaking. One tutor invited students to work in the same small group each week across the semester. By inviting students to keep working with the same group each week, unconfident speakers began to relax. Tutors in our study also noticed that many students did not complete activities that were not compulsory, so we suggest that any activity that requires students to practise speaking skills could be compulsory.

One researcher on this paper has developed a comprehensive speaking activity for use in LDTs. Students are required to prerecord their speech on a phone and then play it in class. This activity does not require students to be in a quiet environment or have stable internet during the classZoom. Students can avoid showing their own faces on camera if they are shy and instead audio record onto their phones. More varied and creative methods of engaging students with speaking skills may be an apt approach in classZooms with students who have low language abilities and come to class from offshore and diverse home environments. This digital approach to fostering speaking skills could also be replicated in face-to-face and hybrid classes which usually have live student presentations. Face-to-face classes could request that students upload digital presentations as drafts for peer review or formative assessment, which are given feedback on, and then improved and repeated in class.

## **5.2. Reading and writing skills**

In contrast to speaking skills, the capacity to visibly engage with the macro skills of writing and reading may have been enhanced online. To compensate for a lack of speaking in the classZoom, our tutors commented that students readily used the chat function. During class, students also wrote in online shared documents, and after class students responded to tutor emails. Like other teachers around the world, our tutors used the affordances of digital modes to enable greater participation and engagement in reading and writing activities (Dyment et al., 2020; Grimmer et al., 2021). Our tutors used synchronous in-class activities and asynchronous pre- and post-work, including Zoom or Teams chat boxes, Teams posts, small group work in breakout rooms, written reflections on class work and individual learning goals, shared files, individual writing, homework on assessments, and one-on-one consultations with tutors. One tutor had a surprising number of students who engaged in class through completing optional written homework during the first semester of moving fully online. The importance of including multiple opportunities to allow for visible and invisible engagement is seen as important (Tutors 6, 12 and 13), especially as students in these LDTs require greater support with class materials than students with high language abilities. Insights from our tutors can be useful when considering ways to include visible and invisible engagement in hybrid and face-to-face classes. Face-to-face tutorials could replicate the benefits of Zoom and Teams chat boxes by using the digital chat box in live classes. Pre-COVID-19 our classes often used the university LMS discussion board for class chat. However, these places were not usually lively with chatter. Face-to-face classes could use live synchronous chat during tutorials by asking students to use their phones or laptops to ask questions. Students must feel confident that they can remain quiet and not have to say anything. Our tutors show that students participate and engage more with class content when there are multiple ways to interact.

## **5.3. Enhanced capacity for feedback**

While there were varying degrees of visible and invisible engagement with the macro skills of speaking, reading, and writing in the classZoom, purely digital delivery enhanced other important aspects of tertiary teaching and learning. Importantly for students who are learning academic language skills, our tutors found that they were more able to offer immediate and personal feedback to more students through the Zoom chat function or Teams posts. The use of technology enhances the timeliness of feedback which is recognised as being crucial in its effectiveness (Henderson et

al., 2019). Unlike face-to-face classes in which students are less likely to ask tutors clarifying questions, the Zoom chat function and Teams posts were often lively with many questions from multiple students. One tutor remarked that, *'students really seem comfortable and engaged using these features'* (Tutor 1). Perhaps not using their cameras or microphones enables shy students, or those concerned with their accents or language proficiency, greater freedom and ability to ask clarifying questions in the classZoom. Other behaviours also enhanced students' abilities to engage in receiving feedback. Tutors noticed a greater propensity of students submitted written work after class, completed individual writing during class, and shared their screens with tutors. These practices allowed feedback to happen more frequently and for a greater number of students in each classZoom.

ClassZoom tutorials could also design in options for students to give self and peer feedback activities, which according to Carless and Boud (2018) develops greater cognitive engagement with criteria and facilitates student responses to feedback. Another approach to enhancing engagement is through a foundational part of our LDT program, the inclusion of student learning cycle activities. These activities, ask students to reflect on their learning practices, identify areas where they need to improve, and the methods and resources by which they can do so. This is then revisited and repeated at several stages or 'learning cycles' through the semester, with students reporting on their own progress, offering peer feedback to others, and eventually reconsidering their own goals. This type of activity could be replicated by other classes which hope to enable more indirect engagement and opportunities for self and peer feedback.

#### **5.4. Enhanced need for social presence**

Some tutors tried to enable greater levels of participation by working on the relational aspects of teaching and learning. With an understanding that students who are not confident in their language abilities require more social connection in order to share their ideas, it is necessary for tutors in our LDTs to purposefully create opportunities for social connection, or 'social presence' (Bhagat & Chang, 2018; HERDSA, 2020; Phirangee & Malec, 2017). One tutor tried to enhance social presence in the classZoom through informal dialogue as students enter: *"I tried getting to know the students – have light conversation at the beginning – to make them feel comfortable to speak up or type in chat. They did seem to respond to that in chat"* (Tutor 12). One tutor noticed that when students used cameras and microphones in class, so that everyone could see each other's facial reactions and hear each other's tone, it was more likely for students to give peer feedback in the classZoom (Tutor 11). This may have been due to the social connection and trust developed through weekly work together on camera. Other tutors lamented the lack of social presence in the classZoom. Many wrote about their disappointment when entering breakout rooms to silence and blank screens. These tutor reflections highlight the challenge and importance of creating social presence in the classZoom, particularly with shy students who are not confident in their language skills.

For meaningful, transformative learning to materialise, students should be provided with opportunities to engage on their own, with their peers and teacher before, during and after class using diverse methods (Pacansky-Brock, Smedshammer, & Vincent-Layton, 2020). Tutors cannot expect such active participation and engagement to happen spontaneously in all classZooms, and instead, they need to offer students multiple ways to interact and learn (Dringus, 2000). To enable this, tutors can give their students a range of visible and invisible engagement options: independent and/or interactive preparatory pre-class activities focussing on the key concepts; collaborative activities during class to clarify and contextualise concepts and apply knowledge; independent/collaborative after-class activities to consolidate and/or further apply knowledge acquired.

## 6. Conclusion

As ALL practitioners, content designers for LDTs, and tutors, this study has made us revisit our own notions of participation and engagement. This study has revealed the complexities and different levels of understanding that impact on the design of materials for tutors to deliver. Initially, as with faculty tutors, there was an impulse for us, as designers, to load everything onto Canvas with materials designed for face-to-face teaching. In addition, the university's migration to the newly introduced LMS coincided with the first COVID-19 shutdowns. However, after several iterations of delivery in the new environment, feedback from both tutors and students has informed our design. We are now aware of the importance of designing in more options for student engagement. We therefore propose that these learnings about visible and invisible engagement in the classZoom are valuable to universities as they move between face-to-face, online and hybrid modes of delivery.

The impact of COVID-19 on teaching and learning in linguistically diverse LDTs has reached far beyond the initial outbreak in early 2020. Being wholly online has been a "game changer" for all involved: tutorial designers, tutors, and students. It has both accelerated the move to a blended model of learning and teaching and challenged familiar pedagogies about enabling and recognising student participation and engagement. Tutors have learnt to be flexible and revisit their understandings of student participation and engagement as defined by direct observable activities like asking questions in class, participating in discussions, and showing a physical presence through 'camera on'. Findings from our tutors revealed insightful reflections on teaching practices and students' behaviour that will inform future online tutorial designs, particularly in relation to students from culturally and linguistically diverse environments. Essentially, we are designing material to help prepare students to be more fully participatory in their subject tutorials which, in the foreseeable future, will be delivered in a blended mode of online and face-to-face scenarios. This is part of the role of the LDT tutor: to demonstrate how to work within an academic context at an Australian university and guide them to discover and achieve their own language goals.

This paper has demonstrated how understanding student participation and engagement can enhance online learning with particular attention to issues of student diversity and digital access. An outcome of these new understandings of participation and engagement enrich current pedagogical perceptions and inspire educators to 'design in' visible and invisible forms of engagement in the classZoom. As these blended modes of educational delivery become more prominent due to the increase in digital tools and knowledge due to the COVID-19 pandemic, and due to an increase in lifelong and short forms of learning, future research will be highly relevant in the area of active learning online. While our study has looked at a very specific cohort, that of linguistically and culturally diverse students studying for long qualifications like undergraduate degrees and Master's programs, there will also be many other students embarking on total or partial online study in the near future. Enabling these students to participate and engage in online learning will require digital dexterity, creativity, and an understanding of the different types of interaction facilitated by these online spaces. Future research could investigate the challenging area of encouraging spoken participation when digital access is sporadic or poor. Research that explores how students from different linguistic and cultural backgrounds like to engage online, and what inspires, provokes and encourages them to learn would also be beneficial. As designers, we will be drawing on the findings from the tutors in our study and continuing to enrich and examine our own digital and active learning practices. The knowledge and experiences over the COVID-19 lockdowns and the move to wholly online teaching and learning continue to affect the way tertiary teachers and students engage with study. Future research in the areas of online, digital, hybrid and blended modes of educational delivery will continue to have relevance as we move beyond the COVID-19 era.

## Acknowledgements

We would like to thank the 13 LDT tutors for their voluntary and valuable contribution to this study. We would also like to thank our reviewers and copyeditor for their careful reading and insightful feedback, and to everybody else who gave thoughtful advice along the way.

## References

- Australian Council for Educational Research. (2010). *Australasian survey of student engagement*.
- Bailenson, J. N. (2021). Nonverbal overload: A theoretical argument for the causes of Zoom fatigue. *Technology, Mind and Behavior*, 2(1), 1–6. <https://doi.org/10.1037/tmb0000030>
- Bergmark, U., & Westman, S. (2018). Student participation within teacher education: Emphasising democratic values, engagement and learning for a future profession. *Higher Education Research & Development*, 37(7), 1352–1365.
- Bhagat, K. K., & Chang, C-Y. (2018). A cross-cultural comparison on students' perceptions towards online learning. *Eurasia Journal of Mathematics, Science and Technology Education*, 14(3), 987–995.
- Bonwell, C. C., & Eison, J. A. (1991). *Active learning: Creating excitement in the classroom* (ASHE-ERIC Higher Education Report No. 1). The George Washington University.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Carless, D., & Boud, D. (2018). The development of student literacy: enabling uptake of feedback. *Assessment & Evaluation in Higher Education*, 43(8) 1315-1325.
- Chew, S. Y., & Ng, L. L. (2015). Participation style of ESL learners in face-to-face and online discussions. *Malaysian Journal of ELT Research*, 11(2), 68–81.
- Dringus, L. P. (2000). Towards active online learning: A dramatic shift in perspective for learners. *The Internet and Higher Education*, 2(4), 189-195.
- Dyment, J., Stone, C., & Milthorpe, N. (2020). Beyond busy work: Rethinking the measurement of online student engagement. *Higher Education Research & Development*, 39(7), 1440–1453.
- Edwards, E., Havery, C., Goldsmith, R., & James, N. (2021). An institution-wide strategy for ongoing, embedded academic language development: Design, implementation and analysis. *Journal of Academic Language & Learning*, 15(1), 53–71.
- Finn, J. D. (1989). Withdrawing from school. *Review of Educational Research*, 59(2), 117–142.
- Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., & Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. *Proceedings of the National Academy of Sciences*, 111(23), 8410–8415. <https://doi.org/10.1073/pnas.1319030111>
- Grimmer, R., Pollard, A., & Rolls, N. (2021). COVID-19 induced change in higher education: Reflections on rapidly transitioning a first-year undergraduate academic literacies unit from face-to-face to online. *Journal of Academic Language and Learning*, 14(2), 95–105.
- Hattie, J. (1999, August 2). *Influences on student learning*. Inaugural lecture, University of Auckland.
- Hellmundt, S., & Baker, D. (2017). Encouraging engagement in enabling programs: The students' perspective. *Student Success*, 8(1), 25–33.

- Henderson, M., Phillips, M., Ryan, T., Boud, D., Dawson, P., Molloy, E., & Mahoney, P. (2019). Conditions that enable effective feedback. *Higher Education Research and Development, 38*(7), 1401-1416.
- Higher Education Research and Development Society of Australasia. (2020). *Making online learning connect with your students: what have we learnt about how we connect with each other online?* [Webinar]. <https://www.herdsa.org.au/herdsa-webinar-series>
- Kahn, P., Everington, L., Kelm, K., Reid, I., & Watkins, F. (2017). Understanding student engagement in online learning environments: The role of reflexivity. *Education Tech Research and Development, 65*(1), 203–218.
- Kahu, E. R. (2013). Framing student engagement in higher education. *Studies in Higher Education, 38*(5), 758–773.
- Kahu E., & Lodge, J. (2018). 2018 special issue: Student engagement and retention in higher education. *Student Success, 9*(4). <https://doi.org/10.5204/ssj.v9i4.1141>
- Kennedy, G. (2020, May). *What is student engagement in online learning ... and how do I know when it is there?* Melbourne Centre for the Study of Higher Education, University of Melbourne. [https://melbourne-cshe.unimelb.edu.au/\\_data/assets/pdf\\_file/0004/3362125/student-engagement-online-learning\\_final.pdf](https://melbourne-cshe.unimelb.edu.au/_data/assets/pdf_file/0004/3362125/student-engagement-online-learning_final.pdf)
- Macfarlane, B., & Tomlinson, M. (2017). Critiques of student engagement. *Higher Education Policy, 30*(1), 5–21.
- Moore, M. G. (1989). Editorial: Three types of interaction. *The American Journal of Distance Education, 3*(2), 1-7. <https://doi.org/10.1080/08923648909526659>
- Muir, T., Milthorpe, N., Stone, C., Dymont, J., Freeman, E., & Hopwood, B. (2019). Chroni-  
cling engagement: Students' experience of online learning over time. *Distance Educa-  
tion, 40*(2), 262–277.
- Nieuwoudt, J. (2018). Exploring online interaction and online learner participation in an online  
science subject through the lens of the interaction equivalence theorem. *Student Suc-  
cess, 9*(4), 53–62.
- Pacansky-Brock, M., Smedshammer, M., & Vincent-Layton, K. (2020). Humanizing online  
teaching to equitize higher education. *Current Issues in Education, 21*(2).  
<https://cie.asu.edu/ojs/index.php/cieatasu/article/view/1905/870>
- Phirangee, K., & Malec, A. (2017). Othering in online learning: An examination of social pres-  
ence, identity, and sense of community. *Distance Education, 38*(2), 160–172.
- Prince, M. (2004). Does active learning work? A review of the research. *Journal of Engineering  
Education, 93*(3), 223–231.
- Quality Indicators for Learning and Teaching. (2020). *2020 student experience survey*.  
[https://www.qilt.edu.au/docs/default-source/resources/ses/2020/2020-ses-national-re-  
port.pdf?sfvrsn=d1237953\\_5](https://www.qilt.edu.au/docs/default-source/resources/ses/2020/2020-ses-national-re-<br/>port.pdf?sfvrsn=d1237953_5)
- Saldana, J. (2013). *The coding manual for qualitative researchers* (2nd ed.). Sage publications.
- Stickler, U., & Shi, L. (2013). Supporting Chinese speaking skills online. *System, 41*(1), 50-69.
- Zyngier, D. (2008). (Re)conceptualising student engagement: Doing education not doing time.  
*Teaching and Teacher Education, 24*(7), 1765–1776.